



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/635,942	08/07/2003	Tom Richardson	Flarion-75APP (101)	1230
26479	7590	01/30/2006	EXAMINER	
STRAUB & POKOTYLO 620 TINTON AVENUE BLDG. B, 2ND FLOOR TINTON FALLS, NJ 07724			ALPHONSE, FRITZ	
			ART UNIT	PAPER NUMBER
			2133	

DATE MAILED: 01/30/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/635,942

Applicant(s)

RICHARDSON ET AL.

Examiner

Fritz Alphonse

Art Unit

2133

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 07 August 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-26 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>1.4</u> . | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 112*

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 25-26 recites the limitation " The machine readable medium " in lines 1 and 26.

There is insufficient antecedent basis for this limitation in the claims.

### *Claim Rejections - 35 USC § 102*

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-26 are rejected under 35 U.S.C. 102(e) as being anticipated by Jurgensen (U.S. Pat. No. 6,973,143).

As to claim 14, Jurgensen (figs. 1-3) shows an apparatus for determining a factor to be used to scale soft input values obtained, from a signal transmitted through a communications channel, including: a receiver (20) for receiving a signal ( $X_{i,n}$ ) transmitted through a communications channel. Jurgensen discloses memory for storing a preselected channel quality value (col. 3, lines 67 through col. 4 line 6); means for generating soft input values ( $Y_{i,n}$ ) from said received signal; and means for computing a scaling factor ( $\alpha$ ) as a function of said preselected channel quality value and at least one of soft input values (col. 3, lines 44-66).

As to claims 5,15-16 and 26, Jurgensen explicitly disclose a preselected channel quality value, which is a channel capacity value (col. 3, lines 67 through col. 4 line 6).

As to claims 17-18, Jurgensen (figs. 1-2) discloses means for determining a scaling factor which, when applied to said received soft values, produces a soft value distribution in said subset of soft value distributions corresponding to said preselected channel quality value; and means for computing from at least some of said soft input values a plurality of channel quality values, each channel quality value corresponding to a different scale factor (col. 3, lines 57 through col. 4 line 23).

As to claims 4, 19-20, Jurgensen (figs. 1-2) discloses an apparatus, wherein means for interpolating each include computer instructions for controlling a processor to implement at least a portion of said computing and interpolating operations (col. 3, lines 64 through col. 4 line 6, col. 4, lines 24-41).

As to claims 21-23, the claims have substantially the limitations of claims 19-20; therefore, they are analyzed as previously discussed in claims 19-20 above.

As to claim 1, Jurgensen (figs. 1-3) shows a method of operating an apparatus to scale soft input values obtained, from a signal transmitted through a communications channel, the method comprising: computing a current scaling factor as a function of a preselected channel quality value and at least one of said soft values (col. 3, lines 64 through col. 4 line 6, col. 4, lines 24-41); scaling one of said soft values using said computed current scaling factor to produce a scaled soft value (col. 4, lines 52-54).

As to claims 2-3, 6-7, Jurgensen (figs. 1-3) discloses a method, wherein determining a scaling factor which, when applied to said received soft values, produces a soft value distribution

Art Unit: 2133

in said subset of soft value distributions corresponding to said preselected channel quality value (col. 3, lines 67 through col. 4 line 6); and computing from at least some of said soft input values a plurality of channel quality values, each channel quality value corresponding to a different scale factor (col. 3, lines 57-66).

As to claims 8-11, method claims 8-11 correspond to apparatus claims 14-16; therefore, they are analyzed as previously discussed in claims 14-16 above.

As to claims 12-13 and 25, Jurgensen (figs. 1-3) discloses a method, wherein said preselected channel quality value is a value corresponding to a quality region that is within but near the edge of an acceptable channel quality region (col. 3, lines 64 through col. 4 line 6).

As to claim 24, the claim has substantially the limitations of claim 1; therefore, it is analyzed as previously discussed in claim 1 above.

### ***Conclusion***

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See PTO-892

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks, Washington, D.C. 20231

**or faxed to:** (703) 872-9306 for all formal communications.

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Fourth Floor (Receptionist).

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Fritz Alphonse, whose telephone number is (571) 272-3813. The examiner can normally be reached on M-F, 8:30-6:00, Alt. Mondays off.

Art Unit: 2133

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Albert De Cady, can be reached at (571) 272-3819.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (571) 272-3824.

Information regarding the status of an application may also be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Fritz Alphonse

Art Unit 2133

January 18, 2006

